ABSTRACT OF THE DISCLOSURE

The invention provides a longitudinal double-mode SAW filter that has a large reflection coefficient by the electrode conductors and having flat pass band characteristics. In the longitudinal double-mode SAW filter, nearly all of higher-order natural mode oscillation displacements A0, S1 and A1 are made present in the first and second interdigital transducer regions. An electrode finger phase weighting is formed to correspond to a BPSK sign where a phase sign changes into 0 or π at a polarity-changing point on an electrode charge distribution function Q(x) that generates on the electrode due to natural modes of oscillation. A single pair of natural modes, which exist stationary in the direction X of propagation of the surface acoustic waves that are utilized, is selected. A symmetrical mode charge distribution (Q(x), -Q(x)) and an obliquely symmetrical mode charge distribution (Q(x), Q(x)) are generated in order to correspond to the regions of IDT1 and IDT2. The PTNG in the control IDT3 region is set to be in the range of 1.02 to 1.04 so as to couple the two together.